FORM PTO-1595 (modified) 10 - 28 - 20)2	Atty. Dkt. No. 016778-0455
WILL E	- ned (30) (31)	U.S. DEPARTMENT OF COMMERC
(Rev 6-93)	≀ SHEE	Patent and Trademark Office
10/21/01 1022630	27	-
To the Director of the United States Patent and Trademark Office	Please record the attached	original documents or copies thereof
1. Name of conveying party(ies): Yoji NISHIO Seiji FUNABA Kayoko SHIBATA Toshio SUGANO Hiroaki IKEDA Takuo IIZUKA Masayuki SORIMACHI Additional conveying party(ies) attached?	Tokyo, Japan Hitachi Tohbu Sem 1-1, Nishiyokote-	ic. ne, Chuo-ku i 4-chome, Chiyoda-ku
3. Nature of conveyance:	Gunma, Japan	
ASSIGNMENT Execution Date:		
September 27, 2002	Additional name(s) & ad	dress(es) attached? NO
 Application number(s) or patent number(s): If this is being filed together with a new application, the 	execution date of the ap	plication is:
A. Patent Application Number(s):	B. Patent Numb	per(s):
10/206,822		
Additional numb	rs attached? NO	
Name and address of party to whom correspondence concerning document should be mailed:		ications/patents involved: 1
David A. Blumenthal FOLEY & LARDNER Washington Harbour 3000 K Street, N.W., Suite 500	7. Total fee (37 C.F.R.X Check EnclosedCharge to deposit a	account
Washington, D.C. 20007-5143	8. Deposit account num	nber: 19-0741
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9. Statement and signature: To the best of my knowledge and belief, the foregois a true copy of the original document. The Commissioner	is hereby authorized to c	

David A. Blumenthal

Signature

Total number of pages including cover sheet, attachments, and document: 3

October 21, 2002

Name of person signing

Date

10/25/2002 DBYRNE 00000094 10206822

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PATENT REEL: 013411 FRAME: 0056

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and address of assignee Elpida Memory, Inc.,

2-1, Yaesu 2-chome, Chuo-ku, Tokyo, Japan

Hitachi, Ltd.,

6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, Japan and Hitachi Tohbu Semiconddctor, Ltd.,

1-1, Nishiyokote-machi, Takasaki-shi, Gunma, Japan

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

title of invention REGISTER CAPABLE OF CORRESPONDING TO WIDE FREQUENCY BAND AND

SIGNAL GENERATING METHOD USING THE SAME

as set forth in this United States Patent Application

check one	□executed concurrently herev	with	
	□executed on		
	Serial No. <u>10/206,822</u>	Filed	July 29, 2002

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all

rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby authorizes the firm of FOLEY & LARDNER to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS				
Name: Yoji NISHIO	Signature: You hishing	Date: 9/27/2002		
Name: Seiji FUNABA	Signature: Seiji Fundra	D ate: 9/27/2002		
Name: Kayoko SHIBATA	Signature: Layope Shibatas	Date: 9/27/2002		
Name: Toshio SUGANO	Signature: Teshio Sugano	1. 1e: 9/27/2002		
Name: Hiroaki IKEDA	Signature: Wiroaki Ikeda	Date : 9/27/2002		
Name: Takuo IIZUKA	Signature: Takur Is Zulot	Date: 9/27/2002		
Name: Masayuki SORIMACHI	Signature: masayki Sorinach (18)	Date : 9/27/2002		
NAMES AND SIGNATURES OF WITNESSES				
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Name: AKIRA MUTO	Signature:	Date: 9/27/2002		
Name: AKIO AOKI	Signature: A bio A obi	Date: 9/27/2002		
Name:	Signature:	Date:		

Note: Prima facie evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

RECORDED: 10/21/2002